

We may say that it is a law of plant building, in certain species, that when a certain arrangement is realized the production of stipule and, eventually, absciss-layer must succeed. When therefore a very similar arrangement is attained in the compound leaf of these species, stipels and absciss-layers follow almost perforce, by the operation of the same structural law of sequence. The repetition of conditions not being perfect, however, the result is not certain in the case of stipels: many compound leaves lack them. But as we have seen, the absciss-layer appears highly constant. The passage of characters from location to location in these instances is comparable to that exhibited by peloric flowers, and by the anomalous forms which stand at the beginning of this paper as a text. Stipels and petiolar absciss-layers, characters of many groups of plants, seem to be effects of a principle which for lack of a better expression I have here called morphic translocation.

THE AMES BOTANICAL LABORATORY, North Easton, Massachusetts.

A NEW ARABIS FROM RIMOUSKI COUNTY, QUEBEC.

M. L. FERNALD.

ON July 18, 1904, an unfamiliar Arabis was collected by Mr. J. Franklin Collins, and subsequently by the writer on one of the headlands which characterize the south shore of the River St. Lawrence at Bic, Rimouski County, Quebec. The plant, growing with *Cerastium alpinum*, var. *beeringianum*, *Saxifraga caespitosa*, *Woodsia oregana*, and other high-northern or northwestern species, on dry calcareous ledges, was strikingly canescent, and, with its strongly refracted pods and white petals immediately suggested Hornemann's *A. Holboellii* of Greenland, and its numerous Rocky Mountain allies.

A careful study of the Greenland plant and of authentic specimens or the original descriptions of its known American representatives fails, however, to identify the strange Arabis from the St. Lawrence. In general habit it resembles many of these species, but its nearest affinity is perhaps with the Greenland *A. Holboellii* itself, from

which it is quickly distinguished by the loose hispidulous pubescence of the stem and pedicels, the smaller flowers and the very slender acutish pods. In the pubescence of its stem the Bic plant approaches the Rocky Mountain *A. Holboellii*, var. *Fendleri*, Watson, but that has loosely pubescent or merely ciliate basal leaves, those of the plant from Bic being densely invested (pannose) with minute whitish stellate hairs, its roseate flowers are much larger, and its less refracted broader and blunt pods are on glabrous pedicels.

The Bic plant, which is obviously an isolated relative of a high-northern and Rocky Mountain group of species, is here proposed as new; and it is a great pleasure to associate with it the name of its discoverer, an indefatigable and accurate student of the northeastern flora.

Arabis Collinsii.—Perennial: stems slender, 1 to 3 dm. high, numerous, from a subligneous base, caespitose, erect, slightly glaucescent, below hispidulous with pale simple or forked hairs, above glabrate or glabrous: basal leaves densely rosulate, oblanceolate to narrowly obovate, acutish, slender-petioled, 1 to 2.5 cm. long, pannose on both surfaces with minute canescent stellate hairs, the petiole ciliate especially at base; cauline leaves lanceolate, acute, auriculate or sagittate at base, more loosely pubescent, the margins often ciliate, the uppermost glabrate: flowers at first erect, on stellate-hispidulous pedicels: calyx 3 mm. long; the oblong loosely stellate sepals with white-margined rounded tips: petals white, becoming pink-tinged in age, 4 or 5 mm. long, glabrous throughout: fruiting pedicels strongly refracted, loosely pubescent, 5 to 8 mm. long: pods glabrous, very slender, 2.25 to 4 cm. long, 1 to 1.5 mm. broad, linear, subacute, straight or barely arcuate; the median rib of the valves prominent only toward the base: seeds rather crowded in 2 rows, suborbicular to broadly oblong, 1 to 1.2 mm. long, very narrowly winged above.—Dry limestone-conglomerate ledges, headland in the harbor of Bic, Rimouski County, Quebec, July 18, 1904 (*J. F. Collins & M. L. Fernald*). Type in Herb. Gray.

GRAY HERBARIUM.